6AK5

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SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

Useful at frequencies up to 400 Mc

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3	ac or dc volts
Current	0.175	amp

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield°	
Grid No.1 to plate	0.03 max.	0.02 max.	μμf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	4	4	μμf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.1	2.8	μμf

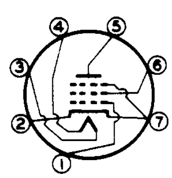
Characteristics, Class A_1 Amplifier:

Plate Voltage	120	180	volts
Grid-No.2 (Screen) Voltage	120	120	volts
Cathode-Bias Resistor	180	180	ohms
Plate Resistance (Approx.)	0.30	0.50	megohm
Transconductance	5000	5100	μmhos
Plate Current	7.5	7.7	ma
Grid-No.2 Current	2.5	2.4	ma
Grid-No.1 Voltage (Approx.) for plate current of 10 μamp	-8.5	-8.5	volts

Mechanical:

Mounting Position	Any
Maximum Overall Length	1-3/4"
Maximum Seated Length	1-1/2"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/8" ±3/32"
Maximum Diameter	3/4"
Dimensional Outline	*See General Section*
Bulb	T-5-1/2
Base	Small-Button Miniature 7-Pin (JETEC No.E7-1)
Basing Designation for BOTTOM VIEW	7BD

Pin 1 - Grid No.1
Pin 2 - Cathode, Grid No.3, Internal Shield
Pin 3 - Heater



Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Grid No.2
Pin 7 - Same as Pin 2

° With external shield JETEC No.316 connected to cathode.

← Indicates a change.

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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AMPLIFIER - Class A_1

→ **Maximum Ratings,** *Design-Center Values:*

PLATE VOLTAGE	180 max.	volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE	180 max.	volts
GRID-No.2 VOLTAGE	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Positive bias value	0 max.	volts
PLATE DISSIPATION	1.7 max.	watts
GRID-No.2 INPUT:		
For grid-No.2 voltages up to 90 volts	0.5 max.	watt
For grid-No.2 voltages between 90 and 180 volts	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
CATHODE CURRENT	18 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	120 max.	volts
Heater positive with respect to cathode	120 max.	volts

→ Indicates a change.

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